

p87PIKAP (K-17): sc-241593

BACKGROUND

p87PIKAP (p87 PI3K adapter protein), also known as PIK3R6 (phosphoinositide-3-kinase, regulatory subunit 6), p84 or HsT41028, is a 754 amino acid cytoplasmic protein that functions as a regulatory subunit of the PI 3-kinase p110 γ complex. Expressed in heart, dendritic cells, macrophages and neutrophils, p87PIKAP drives PI 3-kinase p110 γ activation, interacts with PDE3B and is thought to cause the two proteins to form a scaffolding interaction. The gene encoding p87PIKAP maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

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CHROMOSOMAL LOCATION

Genetic locus: PIK3R6 (human) mapping to 17p13.1; Pik3r6 (mouse) mapping to 11 B3.

SOURCE

p87PIKAP (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of p87PIKAP of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241593 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p87PIKAP (K-17) is recommended for detection of p87PIKAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p87PIKAP (K-17) is also recommended for detection of p87PIKAP in additional species, including equine, canine and porcine.

Suitable for use as control antibody for p87PIKAP siRNA (h): sc-93748, p87PIKAP siRNA (m): sc-151974, p87PIKAP shRNA Plasmid (h): sc-93748-SH, p87PIKAP shRNA Plasmid (m): sc-151974-SH, p87PIKAP shRNA (h) Lentiviral Particles: sc-93748-V and p87PIKAP shRNA (m) Lentiviral Particles: sc-151974-V.

Molecular Weight of p87PIKAP: 84 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.